

REMARKS

Claims 20 and 21 have been amended to recite that the claimed method comprises passing an electric current through the electric conductor having formed on the surface thereof the dielectric layer. Support is found, for example, at page 27, lines 11-23, which describes passing an electric current through the lead wire of the sintered body having thereon an oxide dielectric film layer (page 26, lines 9-16) and discrete fine protrusions (page 26, line 16-page 27, line 3), to thereby form a semiconductor layer on the electric conductor by energization.

Claims 5-21, 23 and 25-27 are rejected, and claim 24 is objected to as being allowable if rewritten in independent form.

Review and reconsideration on the merits are requested.

Claims 5-21, 23 and 25-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US 2003/0133256 A1 to Yoshida et al.

The Examiner now cites conductive film 301 of Yoshida et al as meeting the claimed fine protrusions.

At pages 3-4 of the Office Action, the Examiner considered that the semiconductor layer 302 of Fig. 2 of Yoshida et al is made by energization using the electric conductor as an anode as required by claims 20 and 21. In this regard, the Examiner cites paragraphs [0039] and [0059] of Yoshida et al referring to the element 1 and element 10 as anode conductors. Further, paragraphs [0061]-[0062] are cited as disclosing that the anode conductor comprising an electrolytic layer and conductive polymer are further exposed to electrolytic polymerization in which energization occurs. With respect to the interview of July 20, 2010, the Examiner commented that claims 20 and 21 do not require passing an electric current through the electric conductor, such that this

unclaimed difference does not distinguish over Yoshida et al (noting that the claims only require the semiconductor layer to be made by energization using the electric conductor as an anode).

In response, independent claims 20 and 21 are amended so as to distinguish over Yoshida et al as follows.

The term “anode” can have a different meaning depending on its particular application. In the present claims and specification, the term “anode” is used to designate the positive polarity contact in an electrolytic cell, namely, where oxidation occurs. The term “anode” is similarly used in Fig. 3 of Yoshida et al where the electrolytic cell shown therein includes polymerization anode 7. Yoshida et al also uses the term “anode” to designate a part of the electrolytic capacitor. As described in paragraph [0035] of Yoshida et al, the capacitor element has a structure in which a dielectric layer 2, a solid electrolyte 3, and a cathode conductor 4 are layered in that order on an anode conductor 1. This is in contrast to paragraph [0052] which describes that polymerization anode (positive electrode) 7 and a polymerization cathode (negative electrode) 8 are immersed in the polymerization solution 9, where the anode 7 and the cathode 8 are connected to the power source 12. That is, the polymerization anode (positive electrode) 7 of Yoshida et al used in the electrolytic polymerization is different from the “anode conductor” which is a structural element of the capacitor.

A marked difference between the present invention and Yoshida et al is that in Yoshida et al the film formation substrate 10 (i.e., the anode conductor) is arranged so that it is disposed between the electrodes 7 (i.e., anode 7) and 8 as shown in Fig. 3. There is no electric current being passed through the film formation substrate 10, and Figs. 3-8 of Yoshida et al show that the film formation substrate 10 is separate from the anode 7. See paragraphs [0052], [0053], [0054] and [0055].

The relevant passage at paragraph [0052] of Yoshida et al is reproduced below.

The anode 7 and the cathode 8 are connected to a power source 12. The film formation substrate 10 is, more specifically, an anode conductor on which at least a dielectric layer has been formed. Ordinarily, the anode 7 is fixed near the film formation substrate 10. In that case, it is preferable that the anode 7 and the cathode 8 are arranged such that at least a portion of the film formation substrate 10 is disposed between the electrodes 7 and 8, as shown in FIG. 3 and FIG. 4.

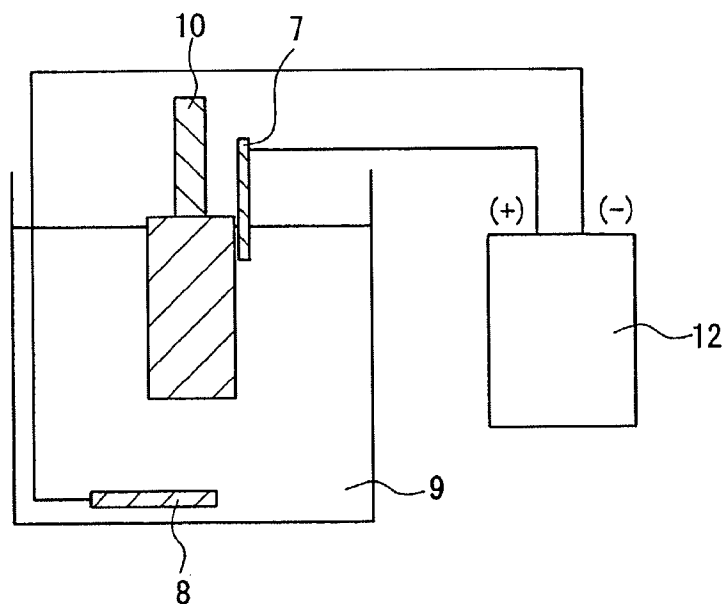


FIG. 3 of Yoshida et al shows that the film formation substrate 10 is separate from the anode 7, such that there is no electric current being passed through the film formation substrate 10.

FIG. 3

To specifically claim this difference, claims 20 and 21 have been amended to recite that the claimed method comprises passing an electric current through the electric conductor having formed on the surface thereof the dielectric layer.

It is respectfully submitted that the claims as amended patentably distinguish the invention over Yoshida et al, and withdrawal of the foregoing rejection under 35 U.S.C. § 103(a) is respectfully requested.

Withdrawal of all rejections and allowance of claims 5-21 and 23-27 is earnestly solicited.

In the event that the Examiner believes that it may be helpful to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington, D.C. telephone number indicated below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Abraham J. Rosner
Registration No. 33,276

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

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